# engineering data service

135 Volts Max.

## 25F5

### MECHANICAL DATA

Bulb .															•	$\Gamma$ -5 $\frac{1}{2}$
Base .							. ]	E7-:	1,	Mi	nia	tur	e E	luti	on	7-Pin
Outline																5-3
Basing																7CV
Cathode											Co	ate	Jb	Jni	pot	ential
Mountin	ıg	Pos	iti	on												Any

### **ELECTRICAL DATA**

### HEATER CHARACTERISTICS

Heater Voltage	25.0 Volts
Heater Current	
Heater-Cathode Voltage	
(Design Center Values)	
Heater Negative with Respect to Cathode	
Total DC and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
DC	100 Volts Max.
Total DC and Peak	200 Volts Max.

## DIRECT INTERELECTRODE CAPACITANCE (Unshielded)

Grid to Pla									
Input									$12.0 \mu \mu f$
Output .									6.0 μμ <b>f</b>

### RATINGS (Design Center Values)

Plate Voltage . .

riace cortage .	•	•	•	•	•	•	•	-	•	•	•	•	
Grid No. 2 Voltag	ge												117 Volts Max.
Plate Dissipation													4.5 Watts Max.
Grid No. 2 Dissipa	atio	on											1.0 Watt Max.
Grid No. 1 Circuit													
													0.1 Megohm Max.
Cathode Bias													0.5 Megohm Max.

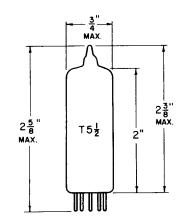
### CHARACTERISTICS AND TYPICAL OPERATION (Single Tube)

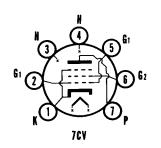
### Class A<sub>1</sub> Amplifier

Plate Voltage				110 Volts
Grid No. 2 Voltage				110 Volts
Grid No. 1 Voltage				-7.5 Volts
Peak AF Grid No. 1 Voltage				7.5 Volts
Zero Signal Plate Current				36 Ma
Maximum Signal Plate Current				37 Ma
Zero Signal Ğrid No. 2 Current				3.0 Ma
Maximum Signal Grid No. 2 Current				7.0 Ma
Plate Resistance (approx.)			. 16	000 Ohms
Transconductance			. 5	800 µmhos
Load Resistance			. 2,	500 Ohms
Maximum Signal Power Output				1.2 Watts
Total Harmonic Distortion (approx.)				10 Percent

## QUICK REFERENCE DATA

The Sylvania Type 25F5 is a miniature beam power amplifier featuring high sensitivity and high efficiency at plate and screen voltage normally available in ac/dc receivers.





## SYLVANIA ELECTRIC PRODUCTS INC.

## RADIO TUBE DIVISION EMPORIUM, PA.

Prepared and Released By The
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## SYLVANIA

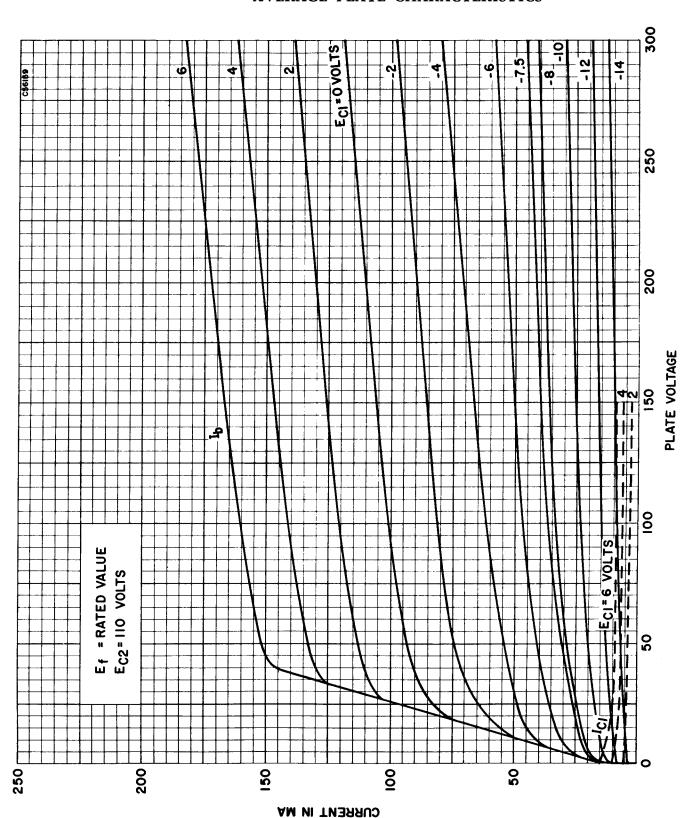
## 25F5

PAGE 2

## Class A1 Amplifier (two tubes in push-pull)

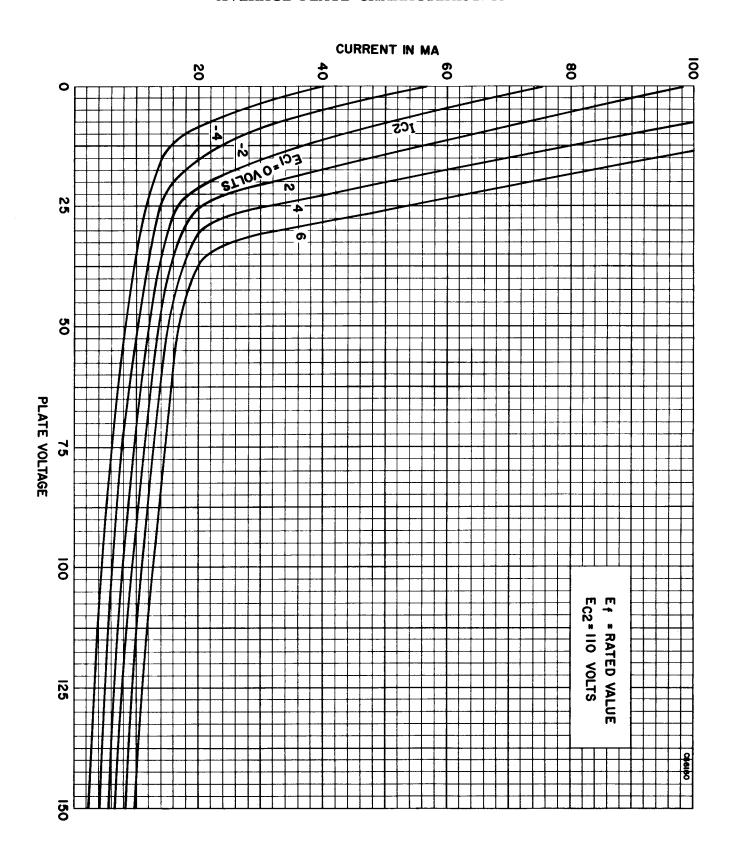
Plate Voltage						110 Volts
Grid No. 2 Voltage						110 Volts
Grid No. 1 Voltage						-8.0 Volts
Peak AF Grid to Grid Voltage						16 Volts
Zero Signal Plate Current						70 Ma
Maximum Signal Plate Current						78 Ma
Zero Signal Grid No. 2 Current						7.5 Ma
Maximum Signal Grid No. 2 Cur	ren	t				13.6 Ma
Load Resistance						4500 Ohms
Maximum Signal Power Output						2.9 Watts
Total Harmonic Distortion						2.6 Percent

## AVERAGE PLATE CHARACTERISTICS



PAGE 4

### AVERAGE PLATE CHARACTERISTICS



## AVERAGE PLATE CHARACTERISTICS (TRIODE CONNECTED)

